

Palm Landscape Architecture Co. Ltd.
棕榈生态城镇发展股份有限公司

Research Progress and Business Model of
the New Camellia Hybrids that Bloom Year-round

四季茶花新品种研究进展与商业模式探索

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2018.01.09

一、棕榈股份茶花新品种选育研究
New Camellia Varieties Breeding Research Situation

- 项目简介 Project Introduction
- 研究成果 Research Results
- 品种展示 Variety Show

• 1.1 Project Background and Conditions

➢ 我国是山茶属植物资源分布中心，世界上近300个原种，其中80%原种分布在中国。茶花在我国栽培有上千年的历史，是我国传统名花之一。Up to now, there are over 300 species of the genus camellia that have been found worldwide, of which the species in china account for 80 percent. In china, camellias cultivation has at least a thousand years of history, Camellia is also one of the traditional famous flowers in China.

➢ 现有传统茶花品种花期主要集中在冬春季节，其它季节欣赏不到茶花，且大部分茶花怕晒怕热，栽培要求高、生长缓慢等特点，极大地制约了茶花在中国的发展应用。All those camellia species and their progeny share a common characteristics: a defined flowering season, usually ranging from early autumn to spring, most of camellia are afraid of the heat, cultivation condition are demanding. These characteristics seriously restrict the popularization and application.

• 1.2 育种目标 Breeding target

为解决传统茶花在花期、抗性及栽培等方面的缺陷，提高茶花的应用价值，棕榈股份山茶育种项目确定3大育种目标：
In order to improve the shortcomings of traditional camellia blooming period, resistance and cultivation, we determines the three main breeding objectives:

- ✓ 延长茶花花期或反季节开花，弥补现有茶花在花期上的不足，达到全年可以欣赏到茶花的目的。
Extend the blooming period or anti-season blooming;
- ✓ 改良茶花抗性，让茶花不再娇贵，实现茶花抗晒、耐热、抗寒的目的。
Enhance the resistance of camellia;
- ✓ 提升茶花的生长优势，降低栽培养护要求，满足茶花生产与园林绿化应用需求。Improve the growth rate of camellia;

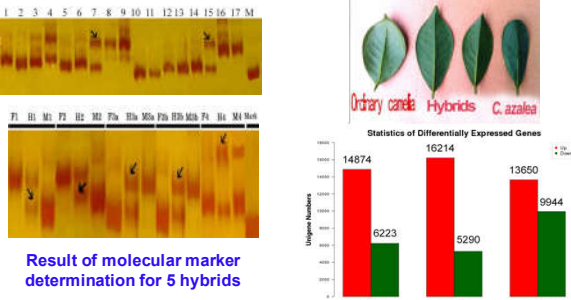
• 2、11年 (2006-2017年) 研究工作 Achievements since 2006

项目 Item	数量 Quantity
开展时间 Duration	11years (2006-2017)
种质资源 Germplasm Repository	600品种 Cultivars, 80原种 species
杂交组合数 Cross-combination	超过150个
成功的杂交组合数 Successful Cross-combination	80个组合
授粉数 Pollinated Flowers	超过 200 000朵
获得的杂交苗 Hybrid Plants Obtained	5 000株
四季茶花杂交新品种 camellia hybrids that bloom year-round	20个组合, 217 品种hybrids
高大乔木型新品种 camellia hybrids that are tall in plants	20 个组合, 55 品种hybrids
常规茶花杂交种 ordinary hybrids	7 个组合, 19 品种hybrids
机遇苗新品种 selected from chance seedlings	31
未开花待观测的杂交种 hybrid plants that have not yet bloomed	1500



2.1 杂交苗真实性鉴定

用SSR分子标记、转录基因组测定、形态学鉴定等方法对杂交苗的真实性进行鉴定。
Based on the results in molecular identification and morphology, our camellia hybrids all are really true.



2.2 新品种证书及国际登录



2.3 四季茶花杂交新品种专著



Honor and Awards



PRESIDENT'S MEDAL of ICS

At present, the only international unit has won the honor twice.



◊ 2012年2月高继银

◊ 2016年2月吴桂昌

• 3、品种展示 Variety Show

3.1 The Camellia hybrids that bloom year round: 217 hybrids.
The Common characteristics of the group:

- A. 花期四季: 夏初始花, 夏末秋冬盛花, 春季零星有花
The hybrids can bloom from early summer and then can last to next early spring.
- B. 花型丰富: 涵盖现有茶花的各种类型花型
Include all the camellia forms and sizes
- C. 抗热耐晒: 与传统茶花比较, 更耐热、耐晒
The plants of the hybrids all are vigorous in growing, under full sun-light (shade is not needed).
- D. 适生性强: 可耐40°C高温, -10°C低温, 在浙江、上海、西安、昆明地区试种可安全过冬。 They have stronger resistances to both hot weather and cold weather. (Usually, they can grow well under over 40°C in summer and under -5°C in winter.)

A) blooming period



春末夏初始花
Late spring or early summer

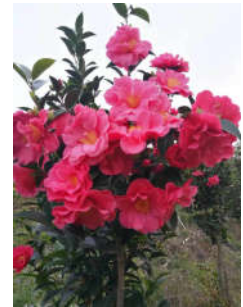


盛夏 Midsummer

Autumn or Winter



秋季 Late autumn



冬季 Middle winter

B1) There are different colors of flowers of the hybrids.



红色 Red



深粉 Deep pink



粉色 Pink



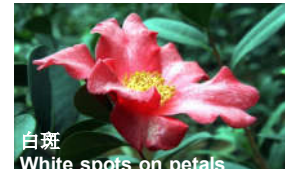
白色 White



宽白边
Edged white



复色
Blotched white



白斑
White spots on petals



窄白边
Edged very narrow white

B2) There are different sizes of their flowers.



◊ large to very large
17cm in diameter



◊ mid-size
中型花 10cm



◊ miniature
小型花



B3) There are different forms of their flowers.



◊ Single flowers
单瓣型

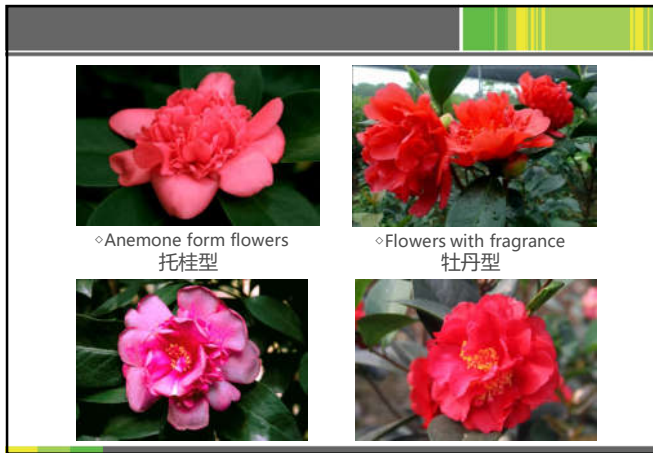


◊ Semi-double flowers
半重瓣型



◊ fully double flowers
完全重瓣型



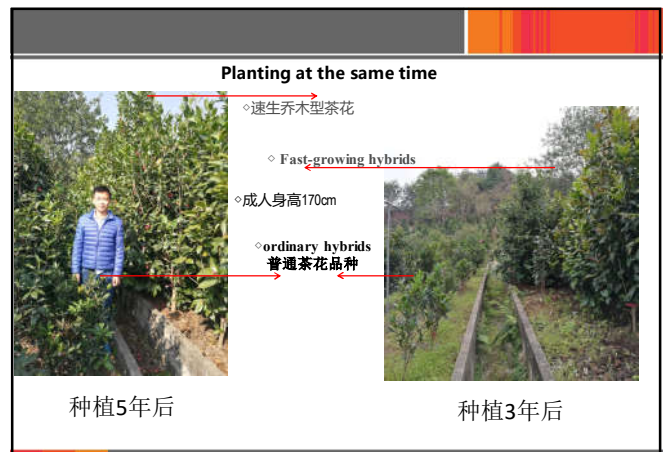


• 3、Variety Show

3.2 速生乔木型茶花杂交种55个

The new camellia hybrids that are tall in plants: 55 hybrids. The Common characteristics of the group:

- A. 花色丰富 Flower color in most of the hybrids is pink to red, but only a few of them is yellowish.
- B. 开花稠密 Their flowers are very dense.
- C. 生长势强 Plants are upright and growth is very quick. They are suitable for gardening.
- D. 花期较长 Blooming period of the hybrids is late-autumn to next spring.





二、棕榈股份茶花新品种商业模式探索

The exploration of business model on new camellia varieties

欧美国家在新品种推广方面，已形成育种者、品种权管理公司、种植商、经销商产业分工，该模式具有特点：

- clear division** 产业分工明确，各司其职，发挥各环节优势。
- specialization** 新品种管理专业化：由专业公司完成新品种测试、商业评估及后期市场的推广与知识产权维护。
- The order** 订单式生产，推广风险较低：新品种经专业公司测试以后，授权给专业的种植商进行订单生产。
- awareness** 新品种品牌效应好，从业者知识产权意识强，市场次序稳定，可持续收益。

目前我国新品种推广没有成熟的商业模式，还处于起步阶段。近几年，我司在新品种保护与推广方面做了如下尝试：

We has made the following attempts to protect and promote new varieties recent years:

- ◆ 发起成立业内首个新品种保护联盟，通过协会促进行业自律，规范新品种的生产和应用。
Initiate the establishment of the first New Varieties Protection Alliance
- ◆ 打造全新新品种供需平台，通过新品种拍卖的形式，协助国内现有新品种推向市场。 Create a fully new platform that can supply and demand new varieties, through the new variety auction form, assist the domestic existing new varieties to be pushed into the market.
- ◆ 积极宣传新品种保护与有序开发新思维，联合政府、媒体及行业内企业，宣传新品种保护理念。 Actively publicize new ideas of new varieties protection and orderly development, and jointly promote the protection concept of new varieties with government, media and industry

The first new variety auction, 2015
2015年促进会成立大会暨首届新品种拍卖会

The second new variety auction, 2016
The new camellia hybrids sold RMB 29 million
棕榈四季茶花以2900万竞拍成交

New variety protection and promotion seminar with new variety signing ceremony
2016年9月28日棕榈研发基地

2017年4月30日湖北武汉 新品种保护与推广高峰论坛
得到国家林业局、各界媒体及行业大大支持参与

通过拍卖会，棕榈股份授权专业代理进行商业开发，充分发挥研发、管理、生产、销售等产业链优势，打造全新产业合作模式！

The Palm Company authorized professional agency to carry out commercial development, fully play the advantages of research and development, management, production, sales and other industrial chains, and **create a new industrial cooperation mode!**

2016年4月1日，通过促进会举办的第二届新品种与新技术拍卖会，广州棕科园艺开发有限公司以2900万元获得棕榈股份四季茶花系列品种的全球十年商业开发权，该模式得到认可和推广，开创我国新品种推广先河。

Through the advancement of the 2nd Auction of New Varieties and New Technology held on April 1, 2016, **Guangzhou Palm Science Horticulture Development Co., Ltd.**, obtained the ten years World's commercially developing right of ever-blooming camellia hybrids from the Palm Company with price of **RMB 29 million**. The pattern has been recognized and promoted, which blazes a trail in China.

签约仪式
Signing ceremony



以新品种管理公司为核心，依托新品种知识产权保护，统筹管理产业链上下游单位，前期成本由各环节单位承担，可分散风险，便于形成产业链，有利于新品种的推广与后期维权，目前我司茶花新品种通过这一合作模式，广州棕科园艺开发有限公司已联合6家种植单位进行合作，许可200万株的扩繁，今年已完成近60万株的生产，大大加快了生产与推广速度。

They were permitted to propagate 2 million plants at present. Nearly 600,000 plants have been produced this year, which greatly speed up the production and promotion



国际交流 International communication

我司山茶研发团队十年磨一剑，成功培育出新一代多季开花茶花品种群，改变了传统茶花只有花开一季的局面，该成果获得了国际山茶界及园艺界的广泛关注，并多次应邀参加日本、美国、西班牙、中国等国家的国际山茶研讨会及相关领域的国际研讨会，做主题分享，获得了高度评价。

We were repeatedly invited to attend congress held in Japan, the United States, Spain, China and other countries, in the field of international seminar on camellia and related do topic sharing, won the high evaluation.

2017' Spain




reported two times Spain and Portugal in 2014

2016' Dali ICS Congress




the President of ICS, Mrs. Patricia Short and the Pre-President, Mr. Guan Kaiyun



German camellia Society in 2008

ICS pre-president, Mr. David In 2010

Edinburgh botanical garden in 2012

Royal Academy of agricultural sciences of Thailand in 2012

ICS vice-president, Mr. Hansen In 2013

ICS vice-president, Mr. Motta In 2016



Loong wood Botanical Garden of U.S.A., in 2012

Professor Brenda visited in 2011, 2013

Disneyland designers, in2013,2015

国外推广 International cooperation

2014年, 我司开始开展四季茶花新品种国际合作工作, 先后与美国、意大利、澳大利亚、荷兰等国家企业开展广泛的合作交流, 并与美国、意大利、澳大利亚等国家企业达成测试推广协议, 2016年与荷兰培兰特PLANTIPP (专业新品种管理公司)达成全面的合作, 授权管理我司茶花新品种在欧洲测试评估、新品种专利申请、生产授权、市场推广及后期品种权的维护。
 signed some test promotion agreements with the United States, Italy, Australia and other countries enterprise.



意大利、澳大利亚、法国、荷兰等国家客户
到我司考察及洽谈国际合作

Clients from Italy, Australia, France and Holland visited our company



2014、2015年与意大利TESI GROUP、澳大利亚Paradise Seed Co.签订合作, 完成5个品种在意大利、20个品种在澳大利亚的试种。

Italy



Australia



欧洲合作苗圃的考察与交流

The Investigation and exchange we did at some cooperative nurseries in Europe



通过与美国茶花协会的交流, 美国茶花协会非常希望我们的四季茶花品种能够引入美国, 在美国茶花协会的宣传与协助下, 我司于2014年开始与美国茶花栽培企业Camellia Forest Nursery、Cam Too Camellia Nursery开展合作沟通。在各方努力下, 我司并于2015年1月与Camellia Forest Nursery签订试种协议。
 We signed a tentative agreement with Camellia Forest Nursery in Jan.2015.



Look for the ways to develop in your quest!
在探索中寻找发展之路!
Thank you very much!

